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## Patent Abstracts of Japan

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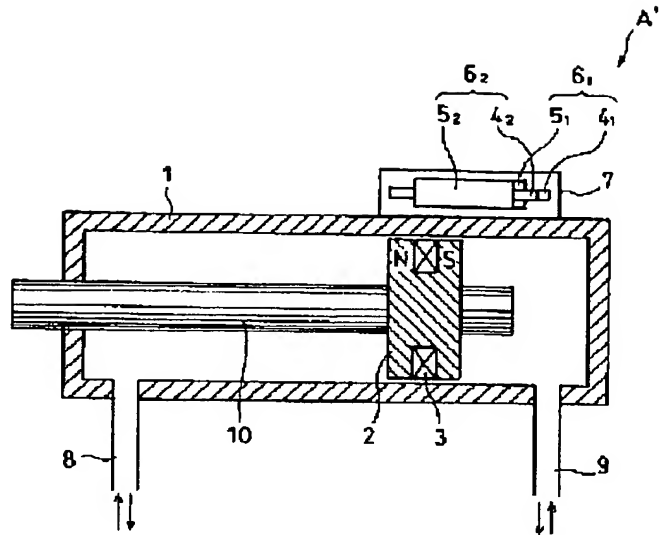
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APPLICANT : TAIYO LTD;

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TITLE : MAGNETIC SENSOR



ABSTRACT : PROBLEM TO BE SOLVED: To provide a magnetic sensor capable of detecting the position of a piston when a cylinder tube is made of magnetic material like iron, and further a magnetic sensor which eliminates influence of geomagnetism and enables high precise detection.

SOLUTION: Two detection coils 61, 62 formed by winding coil 51, 52 around cores 41, 42 composed of high permeability soft magnetic material are arranged in the axial direction of a cylinder 1, shifting their positions. Exciting pulses are applied to one ends of the respective coils 61, 62. On the basis of difference of detected outputs obtained from the other ends, the position of a piston 2 in which a magnet 3 is assembled is detected.

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